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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,714	12/02/2003	Norio Sato	P24356	2210
7055	7590	11/24/2004	EXAMINER	
GREENBLUM & BERNSTEIN, P.L.C. 1950 ROLAND CLARKE PLACE RESTON, VA 20191			BEN, LOHA	
			ART UNIT	PAPER NUMBER
			2873	

DATE MAILED: 11/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/724,714	SATO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	LOHA BEN	2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 12-21 is/are allowed.
- 6) ☒ Claim(s) 1,3,4,6-10,22 and 23 is/are rejected.
- 7) ☒ Claim(s) 2, 5, 11 and 24 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.



**Loha Ben**  
**Primary Examiner**

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>0304; 0704</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

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## DETAILED ACTION

### Minor informality noted in the claims

In claims 6 and 16: bottom line, "the" should be deleted, otherwise "the effective aperture" has no antecedent basis.

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, 4, 7, 9, 10, 22 and 23 are rejected under 35 U.S.C. 102(b) as being anticipated by Karasawa.

As regards claim 1, the lens barrel ( 3 ) of Karasawa comprises an optical system ( 1, 7, 8 ); and an ND filter ( 9 ). The ND filter ( 9 ) has the same characteristic as that of the present claim 1, and that is it is in the form of a shape of a disc arranged on the optical axis of the optical system, and the optical density of the filter decreases in a direction radially outwards from its center. With respect to the short focal length property of the optical system recited, it is to be noted that the lens barrel of the present invention is a zoom lens ( see claim 9 ). And that of the patent is also a zoom lens. For a zoom lens, though this property is not clearly disclosed in the specification of the patent, it is inherent in the zoom lens device, i.e., a zoom lens device always has short focal length side and long focal length side to accommodate intended zooming operation for a wide angle of view.

For claims 3, 4, 7, 9, 10, 22 and 23, the limitations recited are all seen illustrated in Figs. 1-3, and 5 and the accompanying disclosure on columns 1-3 of Karasawa.

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karasawa.

The difference between the subject matter of claim 6 ( depending from claim 1 ) and that of the patent is that the ND filter of the former is formed from a transparent optical element with a coating applied on a surface thereof, whereas that of the latter is the whole optical piece having such a property of ND filter. As is understood, the two optical elements, i. e., the respective ND filters of the former and of the latter, are functionally equivalent. Therefore, it would have been obvious to one skilled in the art at the time of invention to modify the device of Karasawa by replacing the ND filter of Karasawa with that of claim 6, in order to arrive at the present device, since such a transformation for an equivalent function as above indicated is known in the coating art.

For claim 8, Figs. 1 and 2 should be considered.

**Allowable Subject Matter**

Claims 12-21 are allowed. The allowability of these claims is based mainly on the ND coating that is applied to at least one lens element of the optical system. Such an application **is not desired** in Karasawa. Further, it is noted that the coating on a lens element requires more than just a coating on a flat surface of a disc such as element 9 of Karasawa. A surface of a lens element has a curvature that is to be taken into consideration for a predetermined optical result. Still further, since there is more than one lens element, a choice of a lens element over another depends on an intended optical result. For Karasawa, on the other hand, only one choice is noted – the ND filter 9.

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Claims 2, 5, 11 and 24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

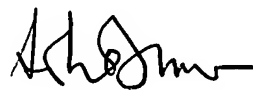
**Communication**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Loha Ben whose telephone number is (571) 272-2323. The examiner can normally be reached on Monday to Saturday, generally between 12:00 noon and 8:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps, can be reached on Monday to Friday, at (571) 272-2328. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

November 22, 2004



**Loha Ben**  
**Primary Examiner**